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TRAINING & EMPLOYMENT

FRENCH DIMENSIONS

A NEWSLETTER FROM CEREQ
AND ITS ASSOCIATED CENTRES

Changing The Firm Through Training

CONTINUING training in French firms has been regulated by law since 1971. This legislation has led above all to short-term training courses which have mainly reinforced the particular skills and qualifications of employees. It has thus hardly improved the capacity to deal with organisational and technological changes and to accompany external reconversions. By contrast, the survey of French research that follows describes experiments that have been undertaken by firms, most of them large scale, in order to re-skill their work force.¹

THESE initiatives are situated within a general dynamic of change: the creation of a less hierarchical work organisation that relies on the initiative and responsibility of the employees; greater labour efficiency through increased flexibility of the productive process and higher standards of quality; an internal market based more on individual and collective competence than on seniority. In short, the entire system of players that makes up a firm has been called into question. The degree of success varies from one case

to another, and for each dimension of change, difficulties can outnumber successes: the new model has yet to be invented.

1. The survey that follows is a summary of a longer article by Michel Feutrie and Eric Verdier which will appear under the title "Entreprises et formations qualifiantes, une construction sociale inachevée" [Firms and Skilling Training Programmes, An Incomplete Social Effort] in *Sociologie du travail*, April-June 1993.

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CONTENTS

CHANGING THE FIRM THROUGH TRAINING

- Training Programmes Based on Co-operation among Players
- An Open Organisation
- Building a New Basic Competence
- Certification and the Internal Market
- Training Efficiency, Industrial Efficiency
- A New Model?

CEREQ BRIEFING

- CEREQ's Programme for 1993
- Recent Articles Published in *Formation Emploi*
- International News Briefs

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A FRENCH RESEARCH CENTRE
FOR ANALYSIS OF OCCUPATIONS AND OF
VOCATIONAL EDUCATION AND TRAINING

Overview of Training Programmes and Experiments

Although the concrete modalities vary, the main characteristics of the experiments are the following: they are lengthy, often totalling more than five hundred hours of training per person; they are mainly aimed at subordinate personnel, especially those with few skills, as well as supervisory personnel, the totality or at least the majority of whom are to be trained. They rely on a pedagogical and organisational interaction between "theoretical" training courses (general and technical subjects) and on-the-job apprenticeships aimed at a far-reaching transformation of job contents. They often involve the participation of trainers from the National Educational system or the Ministry of Labour. These experiments have been set up in various sectors where the process industry dominates, including firms studied by CEREG (electronics [Balut 1990], iron and steel metallurgy [Kirsch 1990], synthetic textiles [Célrier 1990]), in the host laboratories of its associated centres ([Bel et al. 1988], [Dubar et al. 1989], [Dubar and Engrand 1991]) and by other teams (farm-produce industry [Broda 1990] and [Bousquet and Grangerard 1990], chemicals [Tapin 1990] and nonferrous metals [Hellet 1990]).

TRAINING PROGRAMMES BASED ON CO-OPERATION AMONG PLAYERS

THIS co-operation promotes innovation in the content of the training and its concrete implementation throughout the whole of the firm and the personnel categories.

Reviving the Role of the Training Service and Human Resources Management

The explicit intervention of the central management is not explained solely by the scale of the resources involved (an increase of several percentage points in the portion of the wage bill allocated to training, leading to rates of 8 percent and higher, compared to a legal minimum of 1.3 percent). Above all, these training programmes are part of a company plan calling into play the type and quality of the products in particular. Their realisation thus depends on a strategic decision.

The role of the training department is upgraded as a result, but at the same time, the company's trainers have to modify their practices considerably [Feutrie 1990]. The other operational management units are directly involved in the development of the training; fabrication in particular is involved from the initial conception stage. The potential impact of training on the efficiency of production depends on this process. The training department has an essential co-ordinating and advisory role to play in order to reconcile the expectations of the other parts of the company and its employees with the goals and practices of the trainers, whether they are in-house or external. This is a far cry from the "catalogue" training course, the take-it-or-leave-it training product. The training department should have representatives in every unit involved.

Strong Government Involvement

The authorities contribute to funding through training agreements with the firms. These stipulate that the government assumes a portion of additional training expenses (33 % for unskilled personnel and, in certain cases, part of employees' pay during the training period). Long-term activities are carried out with the direct collaboration of the National Education system or the

AFFA (Ministry of Labour). Whether the training leads to a nationally certified diploma or not, the public trainers are seen as guarantees of the quality of the instruction provided.

A Demanding Process for Employees

Employees are not simply targets to be reached. They must be active participants in the training process and should in most instances commit themselves to carrying out part of the training outside of work time, especially for general training such as math and French (which is contrary to the original measures of the 1971 Vocational Training Act: see *Training and Employment* n° 2, Winter 1991). Trainees sometimes feel like they are enrolled in degree courses recalling their initial academic experiences, which were often marked by failure. This leads to a process of selection which, in the cases studied in the food products industry [Broda 1991], affects nearly half of those involved, either before or during training. All the operations have reduced the number of trainees, most often for lack of candidates but also because of department or shop supervisors' reluctance to allow valued employees to absent themselves for long training programmes.

A Negotiated Training Programme

Negotiation with the unions is more likely to result in an agreement when the training is carried out by a public body that grants a national diploma. The unions accord considerable value to certification, or at least to the participation of public bodies as a guarantee of their interests.

The pursuit of national certification will also depend on the expectations of both employees and employer about the company's employment prospects. A strong probability of external reconversions in the medium run will favour the national diploma as a form of insurance for the future.

The firm tends to reduce costs of conforming to national degree requirements by negotiating the length of training and having employees' work experience validated. The latter is an important issue because it entails the establishment of a continuum between skills specific to the firm and a general resource, the diploma or degree recognised by the State.

AN OPEN ORGANISATION

SKILLING programmes go far beyond the limited purposes of the training course. They are intended to generate within the customary operation of the organisation a capacity to produce not only goods but also know-how [Midler 1991]. Training programmes initiate an uncertain process in terms of the final form of the organisation, which, in large part, will be the result of what the employees make of it through training [GRAP 1988a]. Engineers often have difficulty accepting a form of work organisation where, in contrast to the rationalisation of Taylorism, each person's role is not predefined.

Organisation through Experimentation

The desire to fit into a totally predefined mold would be quite contradictory to the programme and the employees' involvement in it. "The development of skills will take place throughout the training period, as the shop collectivity becomes conscious of its new capacities, and new procedures are envisioned for the rotation of work stations and the division of the workload" [GRAP 1988a].

I Formalised Procedures and Common Languages

It is necessary first of all for the parties involved to have a common frame of references for action. The two most striking techniques are conceived with this end in mind. The "training evaluation" creates individualised training paths which provide trainees with frequent indications about their position and orientation in relation to the goals to be attained. The formal definition of the trainees' acquired experience, before and during training, helps to harmonise individual programmes with the occupational projections that govern the programme as a whole [Tapin 1990]. The "occupational groups" responsible for establishing job "reference systems" on the basis of learning situations involve a process of exchanges among representatives of different labour categories (operatives, supervisors, engineers and trainers). The relational work undertaken in this group is aimed particularly at co-ordinating the formalised instruments set up by the reference systems with the specific work situations in the firms and the diversity of individual competences. These cognitive mechanisms are intended to ensure the compatibility of the activities of the different supervisory and occupational categories with those of the trainees, whose "initiative, autonomy and responsibility" are to be reinforced. This comes very close to the "intellectual competence" as defined by Aoki [1990] in relation to Company J, built on a model of so-called "horizontal" co-ordination, as opposed to the hierarchical model. "Whilst it is necessary to imagine new forms of organisation, this does not mean conforming to organisational charts, but building organisations based on synergies of competence" [Helliet 1990].

BUILDING A NEW BASIC COMPETENCE

THE main issue is that of achieving compatibility among often contradictory modes of training in order to integrate them into the same programme.

I Academic Knowledge and Practical Know-How

Three kinds of training must be combined:

- **General training** aimed at simultaneously or separately freeing the capacities for relearning, reviewing existing knowledge, acquiring basic knowledge and preparing for the mastery of the second category of applied knowledge and know-how.
- **General technical knowledge** aimed at mastering the technical know-how required by the company's activity and the particular work station involved.
- **Training integrated into or linked with work** on a practical or behavioural level, aimed at both integration into new work collectives and the concrete, "real-life" mastery of the operations required by the function to be ensured.

These programmes seek to break with a segmented vision of work procedures and to encourage understanding of the production process as a whole. The recognition of work experiences will help to individualise training and thus to integrate employees' individual characteristics into a collective process. In the case of women workers in the farm-produce industry, Broda [1991] stresses the fact that employees will be all the more willing to involve themselves in an intensive training programme if it is based on their work situations. This interaction between individuals and the collective project is intended to continue throughout the

training process: each trainee receives frequent feedback about his or her position relative to the assigned objectives [GRAP 1988a], which derive from a common definition of the jobs to be created.

The creation of this new competence is likely to encounter two major obstacles: the first consists of favouring a short-term adjustment over fixed quality standards; this "adaptive obstacle" is all the more common in that it corresponds to usual firm practices. The other obstacle stems from adjusting to a norm external to the firm--the standard programmes of the National Education system--and thus decreasing the performance of the training programme.

I Formalising Knowledge

The different experiments and methods depend on a prior definition of the activities that will constitute the new jobs, the necessary capacities and required competences (the "frame of reference"). The transition from describing activities to conceptualising them is in fact a task of discerning accumulated competences. The development of knowledge takes place through a process of formalisation aimed at going from practical, "opaque" knowledge to explicit knowledge, at constructing technical procedures rather than empirical approaches [Midler 1991a].

Certain experiments create industrial knowledge that is strongly tied to technical norms but still based on individual specificities: "Trainees were asked to prepare work-station cards, a training manual, etc., which entails a formalisation of information on the operation and setting of the machines" (although it is acknowledged that all the setters were not in agreement on the best way of doing this) [GRAP 1988a].

CERTIFICATION AND THE INTERNAL MARKET

THE carrying out of these activities coincide with a transformation of the link between training and company classifications [Méhaut 1992]. The model of the strict link is clearly described by Helliet [1990]: "The principle of the recognition of diplomas [within the classification levels] is absolute. The diploma retains its symbolic nature in several respects: it is a recognition of acquired training, a recognition of the individual's industrial efficiency and finally, a social recognition. The levels that diplomas represent have not posed any problem of recognition to date, even in the case of a conflictual situation". The case studied by Célérier [1990] introduces a compromise between previous management, which favoured seniority, and a tighter link between the individual's degrees and his or her classification: workers with diplomas advance one level relative to their previous situation, but subsequent advancement with the status of multi-skilled worker takes place on the basis of seniority.

In all instances, the company demonstrates the intention to rebuild workers' careers on the basis of training that is certified and in any case recognised over seniority, the criterion that traditionally dominates French firms.

This move towards an internal market of the "industrial" kind, based on formal rules, is complemented by a "tutorial" supervision involving periodic evaluations of individuals during the training itself and afterwards in the course of regular shop activity. The place accorded to individual qualities ("what is each person capable of

doing?" rather than "what does he do?") requires evaluations that regularly verify the progress of the link between knowing and doing and, on occasion, entails support of the supervisory personnel [Kirsch 1990a]. This support is invoked to guarantee day-to-day compatibility of industrial quality requirements and individual competences.

TRAINING EFFICIENCY, INDUSTRIAL EFFICIENCY

THE classic managerial notion of the links between training and organisation attempts to create a "reservoir" of general competences in order to adapt the work force to the company's future needs. This approach can come up against serious dysfunctions, however. For lack of short-term concretisation in job organisation, contents and management, the sequential approach--first you train and then (perhaps) you change the work--discourages employees and does not generate the confidence elicited by the creation of a rigorous training programme for those being trained and for the company.

Conversely, the process analysed by Midler [1988 and 1989] in a robotised sheet-metal shop brings out the importance of changing organisation immediately, of trying it out in a real-life situation and thus of making the reorganisation a training process in itself. The work-training link is no longer strictly pedagogical: it is also organisational.

In addition, however costly these degree-granting training programmes appear at first glance, they are in fact much less so in view of the rapid improvements in quality and reduction of breakdown rates that can be

observed, even during the training, when changes in the work process are concretised [Helliet 1990]. Obtaining gains in competitiveness is important in two respects:

- to justify the interest of intensive training in the eyes of the firm's technical and financial management;
- to promote the ability to meet more stringent manufacturing norms, which is particularly difficult to obtain in the short run.

A NEW MODEL?

THE fragility of the process is apparent in several respects. First of all, economic circumstances were often quite specific, in that the sometimes extreme deterioration of the financial situation, and of competitiveness, meant that skilling training was practically the last resort. Such grave difficulties called into question the prior system of organisation, behaviours and rules and opened a rather uncommon field of intervention to the experimenters. Healthier firms might well have been more prudent.

For certain companies, the financial cost involved means that further experiments depend on obtaining new public funding. The intensiveness of the training courses, spread over several semesters, raises the fear of numerous drop-outs, particularly when the target population has very few skills. Finally, the personalities of those who devise and direct the experiment play a determining role: according to Bousquet and Grandg erard [1990a], the departure of the initiators can weaken or destabilise objectives.

Eric Verdier

(Translation by Miriam Rosen)

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